

Title (en)  
GENERATION AND USE OF ISOTOPIC PATTERNS IN MASS SPECTRAL PHENOTYPIC COMPARISON OF ORGANISMS

Title (de)  
ERZEUGUNG UND VERWENDUNG VON ISOTOPENMUSTERN BEIM MASSENSPEKTROMETRISCHEN PHÄNOTYPENVERGLEICH VON ORGANISMEN

Title (fr)  
GÉNÉRATION ET UTILISATION DE MOTIFS ISOTOPIQUES DANS LE CADRE DE LA COMPARAISON PHÉNOTYPIQUE D'ORGANISMES PAR SPECTROSCOPIE DE MASSE

Publication  
**EP 2205342 A4 20100929 (EN)**

Application  
**EP 08836627 A 20081002**

Priority

- US 2008078604 W 20081002
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- US 18638108 A 20080805
- US 18639508 A 20080805

Abstract (en)  
[origin: WO2009046204A1] A method for assaying phenotypic similarity or dissimilarity between organisms is disclosed in which a composite sample of admixed first and second samples is provided. The first, standard sample contains average concentrations of compounds of molecular mass less than about 1000 AMU present in the organism species. The second, assay sample contains compounds of having a similar molecular mass present in the organism whose phenotype is to be assayed. The constituents of both samples are (i) in a liquid medium and (ii) each compound of a sample has the same, first and second respective amounts of first and second stable isotopes of a first atom. The composite sample is mass spectroscopically analyzed for analytes, with the ratio of first to second isotope being determined for each analyte, along with a composite sample median ratio. The ratios for each analyte are compared to the median, with outlying ratios indicating dissimilarity.

IPC 8 full level  
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CPC (source: EP)  
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Citation (search report)

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- [Y] US 7045296 B2 20060516 - PARKER KENNETH C [US], et al
- [Y] D.F. WILLIAMS ET AL.: "Seasonal oxygen isotopic variations in living planktonic foraminifera off Bermuda", SCIENCE, vol. 206, 26 October 1979 (1979-10-26), Washington DC USA, pages 447 - 449, XP002596704
- See references of WO 2009046204A1

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